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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/518,287	03/03/2000	David A. Foti	04899-034001	6548

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EXAMINER
TRUONG, LECHI

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/518,287	FOTI ET AL.	
	Examiner	Art Unit	
	LeChi Truong	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1-32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al (US 6, 282,699) in view of Hartmut Poglheim (Genetic and Evolutionary Algorithm Toolbox for use with Matlab).

As to claim1, Zhang teaches method (the textual code, col 4, ln 1-40, col 12, ln 21-40/ col 10, ln 31-40, DLL API, col 13, ln 1-57), a set of method signatures (the script server identification, col 13, ln 40-53), an object (the code node, col 4, ln 1-41/ new DLL, col 13, ln 20-52), an object-oriented environment (a text-based language, col 4, ln 1-45), a method name (Get script, Set Script, Get Value, col 13, ln 1-52), data type (string, col 13, ln 1-52), list of any data type (an available data type, col 17, ln 1-45), corresponding method (object class, col 13, ln 40-57/ 1vsnGet Value, col 15, ln 34-55/ Fig7), the data types of the signature(data types, col 19, ln5-51), input parameters(input/ Lab VIEW data type, col 19, ln 5-51), array-based computing environment(Lab View, col 19, ln 5-51, col 14, ln 14-20), array(array col 14, ln 14-20),invoking the method corresponding(invoke executable code , col 3, ln 45-58).

Zhang does not teach ranking the method signature as a function, selecting … the rank. However, Poglheim teach Rank-based fitness, (section Rank-based fitness assignment), objective function (section 6.3, Objective function value), fitness function (section, 6.4, fitness value), selective (section Selection and section Rank-based fitness assignment)

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to claim 2, Zhang teach a mathematical tool (Malab software program, col 15, ln 66 to col 16, ln 1-40).

As to claim 3, Zhang does not teach calculating fitness ranking. However, Poglheim teach the fitness value for an individual is calculated (section Rank-based fitness assignment).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to claim 4, Zhang does not teach a preference value, the corresponding signature as a function. However, Poglheim teaches object value fitness value (Section 3.1 Rank-based fitness assignment/ Section 6.3, 6.4).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to claim 5, Zhang does not teach supper classes, calculation the fitness ranking, calculating difference in level within class. However, Poglheim teaches derived from the objective function (Fitness values, section 6.3), the fitness assigned to each individual depends only on its position (Rank-based fitness assignments, section 3.1).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to 6, Zhang does not teach calculating a difference in a number of dimensions. However. Poglheim teaches the number of individual in the population is used for calculation (section 3.1).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to claim 7, Zhang teaches data type of the signature (data type, col 19, ln 7-55), the data type of corresponding input parameter (Lab View data type, col 19, ln 7-55), object-oriented environment (HIQ or MATLAB, col 19, ln 7-55).

As to claim 8, Zhang does not teach a two-dimensional array storing. However, Polemic teaches table 1: Dependency of fitness value from selective pressure (section 3,1).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to claim 9, Zhang teach the input parameters (input data/ inputs, col 4, ln 5-45/ col 3, ln 45-58), data type (text code, col 4, ln 5-45/ the executable code, col 3, ln 45-58/ data type, col 17, ln 10-30), the object-oriented environment (a server program, a text-based language, col 5-45/col 3, ln 35-58), computer environment (the other nodes, col 4, ln 7-45/ the block diagram, col 3, ln 35-58).

As to claims 10, 11. Zhang teaches virtual machine, java virtual machine (java, col 4, ln 5-15), interpreting the method (an interpreter, col 11, ln 34-63).

As to computer program of claim 12, see the rejection of claim1.

As to computer program of claim 13, see the rejection of claim 2.

As to computer program of claim 14, see the rejection of claim 3.

As to computer program of claim 15, see the rejection of claim 4.

As to computer program of claim 16, see the rejection of claim 5.

As to computer program of claim 17, see the rejection of claim 6.

As to computer program of claim 18, see the rejection of claim 7.

As to computer program of claim 19, see the rejection of claim 8.

As to computer program of claim 20, see the rejection of claim 9.

As to computer program of claim 21, see the rejection of claim 10.

As to computer program of claim 22, see the rejection of claim 11.

As to claim 23, Zhang teaches an interface (DLL, col 13, ln 20-53), identifying/ signature (identification, col 13, ln 20-53), an object (the code node, col 4, ln 1-41/ object class, col 13, ln 20-53), the object-oriented environment (the server program, col 13, ln 20-53/ text code, col 11, ln 35-63), a technical computing environment (the graphical program, col 11, ln col 11, ln 35-67 to col 12, ln 1-39/LABVIEW, col 20-53), a calculation workspace (the front panel, col 9, ln 1-6/ the node), a command interpreter(command to API, col 12, ln 6-11/ run, col 11, ln 35-41, Fig 5), a reference to a method (code , col 12, ln 1-39), an object (the code node, col 12, ln 1-39), the object-oriented environment(the server instance/ java , col 12, ln 1-39), a signature selector(Choose type, col 17, ln 10-30, col 19, ln 7-33/ indicator, col 17, ln 10-30), list of signatures corresponding (a list of the available data types, col 19, ln 7-35), method (execution of the code, col 20, ln 15-26), object-oriented environment (HIQ , MATLAB, col 19, ln 7-39),invoke one of the methods(invoke execution of the code, col 3, ln 45-58).

Zhang does not teach ranking the method signature as a function, selecting ... the rank. However, Poglheim teach Rank-based fitness (section Rank-based fitness assignment), objective function (section 6.3, Objective function value), fitness function (section, 6.4, fitness value), selective (section Selection and section Rank-based fitness assignment)

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to the system of claim 24, see the rejection of claim 2.

As to the system of claim 25, see the rejection of claim 3.

As to the system of claim 26, Zhang teaches data type listed of the signature (data type, col 19, ln 7-55), the data type of corresponding input parameter (Lab View data type, col 19, ln 7-55), object-oriented environment (HIQ or MATLAB, col 19, ln 7-55).

Zhang does not teach the fitness ranking, the corresponding signature as a function. However, Poglheim teaches object value fitness value (Section 3.1 Rank-based fitness assignment/ Section 6.3, 6.4).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to the system of claim 27, see the rejection of claim 5.

As to the system of claim 28, see the rejection of claim 6.

Zhang does not teach a preference value. However, Poglheim teaches object value fitness value (Section 3.1 Rank-based fitness assignment/ Section 6.3, 6.4).

It would have been obvious to apply the teaching of Poglheim to Zhang in order to sort and to select the method signatures that are based on the selection probability.

As to the system of claim 29, see the rejection of claim 8.

As to the system of claim 30, see the rejection of claim 9. Further, Zhang teaches conversion table (the table of Fig 15), input parameters (LabView data types, col 19, ln 31-33), the data types supported by the object-oriented environment (data types in HiQ and MATLAB, col 19, ln 31-33).

As to claim 31, see the rejection of claim 10.

As to the system of claim 32, see the rejection of claim 11.

As to the system of claim 33, see the rejection of claim 6.

2. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al (US 6, 282,699) in view of Hartmut Poglheim (Genetic and Evolutionary Algorihm Toolbox for use with Matlab) and further in view of David M. Gay (Symbolic-Algebraic Computations in a Modeling Language for Mathematical Programming).

As to claim 33, Zhang does not teach a Java Native Interface. However, Gay teaches the java Native Interface (Page 7, ln 17-20)

It would have been obvious to apply the teaching of Gay to Zhang in order to call function written in another language.

3. ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

Fax phone: AFTER_FINAL faxes must be signed and sent to: (703) 746-2738, OFFICAL faxes must be signed and send to: (703) 746-7239, NON OFFICIAL faxes should not be signed, please send to: (703) 746-7240

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 9000.

LeChi Truong
January 27, 2003

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